

In the Claims

1-21. (Withdrawn)

22. (Original) A distributed system for publishing and retrieving content in a network, comprising:

a plurality of computer systems connected together in a peer-to-peer fashion and having characterized network resources that can be contributed to the network in return for a predetermined amount of credits that are accumulated by those computer systems contributing resources to the network such that the computer systems can exchange the credits for performing interactions across the network; and

one or more agent applications associated with the computer systems for allowing the computer systems to publish and retrieve content from the network by initiating the peer-to-peer interactions across the network between the agent applications.

23. (Original) The distributed network of Claim 22, wherein the network resources include any of disk space, bandwidth, and CPU processing cycles.

24. (Original) The distributed network of Claim 23, wherein each interaction across the network involves a transaction cost.

25. (Original) The distributed system of Claim 22, further comprising a credit server for maintaining a database of previously used credits and for authorizing a valid credit transaction between interacting agent applications within the network.

26. (Original) The distributed system of Claim 22, wherein the agent applications comprise one or more client agent applications for enabling the computing systems access and interact with the agent applications in the network, one or more broker agent applications for performing brokering transactions between the agent applications in the network, one or more tracker agent applications for providing a listing of available resources within the network, one

or more reputation agent applications for tracking the reputations of the computer systems in the network, and one or more payment agent applications for validating credit transactions within the network.

27. (Original) The distributed system of Claim 26, wherein the one or more broker agent applications directly provide brokered network resources to requesting computer systems within the network.

28. (Original) The distributed system of Claim 26, wherein the one or more tracker agent applications include one or more metatracker agent applications for maintaining the network location of the one or more active broker agent applications and a listing of the associated resources that those active broker agent applications broker within the network, one or more content tracker agent applications for storing dinodes to locate data blocks constituting a published data file on the network, and one or more publication tracker agent applications for recording storage locations on particular computing systems where the data blocks are stored.

29. (Original) The distributed system of Claim 28, wherein the tracker agent applications maintain public information relating to the various agent applications within the network.

30. (Original) The distributed system of Claim 26, wherein the client, broker, tracker, reputation, and payment agent applications are integrated as a single agent application.

31. (Original) The distributed system of Claim 26, wherein the peer-to-peer interactions are performed in accordance with a micropayment transaction process.

32. (Original) The distributed system of Claim 31, wherein the micropayment transaction process includes causing the client agent application associated with a first computing system to offer a given amount of credits to a broker application associated with a second computing system for performing the transaction within the network, causing the broker

application to loan to the client application an amount of credits equal to the offered amount of credits to enable the first and second computing systems to engage in the transaction, causing the payment agent to verify the offered credits to insure that the offered credits have not been previously spent in a prior transaction and withdraw the offered credits from future use within the network, and if verified, causing the broker application to complete the transaction and retract the loaned credits in return for new credits that are associated with the second computing system in an amount equal to the amount of offered credits.

33. (Original) The distributed system of Claim 28, wherein the broker agent applications publish content to the network by receiving an original file to be published to the network, dissecting the original file into a series of pieces of the original file, further dissecting each piece of the original file into a predetermined number of file blocks, generating a respective block identification tag for each of the file blocks, and storing the file blocks on one or more storage block servers within the network.

34. (Original) The distributed system of Claim 33, wherein the broker agent applications further generate a sharemap for the original file that describes how to reassemble the pieces of the original file from the file blocks and the original file from the pieces of the original file.

35. (Original) The distributed system of Claim 34, wherein portions of the sharemap are stored at one or more dinodes within the network, and wherein the content tracker maintains information about the dinodes within the network so that the original file can be reassembled.

36. (Original) The distributed system of Claim 33, wherein the file blocks are retrieved in parallel to reassemble the original file.

37. (Original) The distributed system of Claim 36, wherein only a portion of the file blocks are needed to reassemble the original file.

38. (Original) The distributed system of Claim 22, wherein the system uses a

protocol for transmitting messages between the agents, the protocol including a transport layer for moving secure data between the agents, an encryption and authentication layer for encrypting and decrypting the data, a conversation layer for associating initiating messages with their responding messages counterparts, and a transaction layer for enabling the interactions between the agents in the network.

39-76. (Withdrawn)